



Modernization Through Spares Workshop

May 27 - 28, 1997



AGENDA

Wed. May 28	12:30 - 12:45	• Introduction
	12:45 - 13:15	• Workshop Structure
		• Objective
		• Goal
		• Approach
		• Overview of Acquisition Reform Impacts on MTS
		• Background Material
		• Definitions
		• Case Studies
	13:30 - 14:30	• PEO - AMD Low Voltage Power Supply
	14:45 - 15:45	• TOW (Basic Bradley) Error Detector Card
	16:00 - 16:45	• Open Discussion/Summary
Thurs. May 29	8:00 - 8:45	• Example: Javelin
	9: 00 - 10:00	• Group Discussion: Barriers, Environment, Recommendations, Processes, Methodology
	10:00 - 11:00	• Preparation of Outbrief



Output Format

15 Minute Presentation to General Session

- Objective
- Goal
- Findings
 - Barriers/Constraints
 - Environment
 - Methods
- Process
- Recommendations

**Modernization Through Spares Must Be a Proactive Process
Integrated into a Weapon Systems Acquisition Strategy**



Workshop OBJECTIVE

Task from the General Session to our Workshop is...

- **To identify an Approach, Methodology, and Process for identifying Modernization Through Spares candidates and discuss implementation strategies and approaches**
- **To identify Existing Situation**
 - **Barriers**
 - **Enhancers**
 - **Environment**
- **To develop Recommendations on MTS implementation**
 - **How do we find candidates?**
 - **What is keeping us from doing it?**



Workshop Goal

To develop and provide a framework/process to identify, monitor, and accelerate the introduction of leading edge/state of the art technologies into a spares modernization effort to meet user requirements and reduce system life cycle costs

Key elements...

- **Continuous monitoring of user program requirements and commercial/emerging technologies**
- **Evaluation and recommendation for product evolution and technology insertion**
- **Identification of funding sources to facilitate modernizing through spares efforts**
- **Support programs and users in developing and implementing modernization through spares programs/strategies**

Modernization through Spares must be a Proactive process as opposed to the current Reactive process



General Session Guidance

- ✧ **Modernization Through Spares is a concept which everyone must address**
- ✧ **DoD and DA Programs provide opportunities for funding MTS activities**
- ✧ **Leveraging resources for maximum benefit is key to success**

Acquisition Reforms have created an environment which encourage innovative solution to weapon system life cycle problems and issues



The Challenge -- A Tough Resourcing Environment

DOD and the Army are in the middle of an era of Downsizing and Declining Budgets -- but must facilitate the means to...

- **Foster modernization and enhance performance**
- **Reduce the looming Operation and Sustainment costs of high technology systems**
- **Better utilize remaining manpower**

Resolving spares modernization issues should be inherent in all of our objectives



Approach

- To present and discuss case studies which provide examples of MTS to identify ways of implementing an MTS strategy
- To determine and discuss ways of planning, coordinating, and implementing an MTS program to achieve Acquisition Reform objectives
- To identify and discuss Barriers, Environments, Recommendations, Processes, and Methodologies to MTS concept
- Gather workshop comments and develop output packet for presentation to the overall Conference



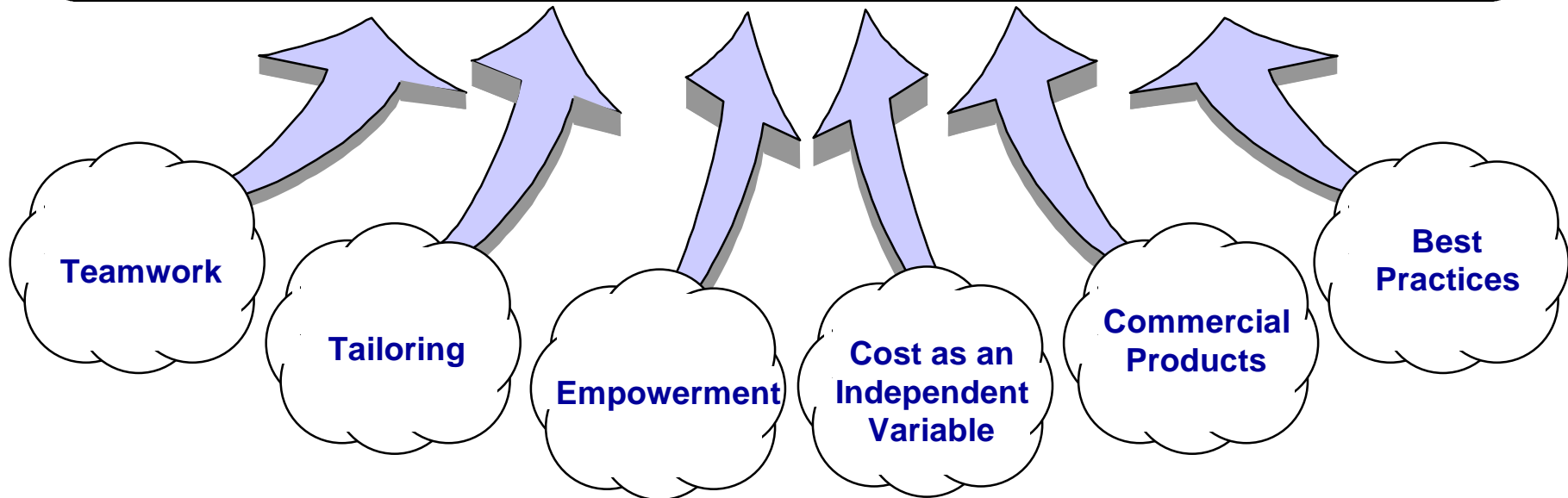
Acquisition Reform Impacts on Modernization Through Spares



Acquisition Reform Objective

“ The primary objective of the defense acquisition system is to acquire quality products that satisfy the needs of the operational user with measurable improvements to mission accomplishment, in a timely manner, at a fair and reasonable price”

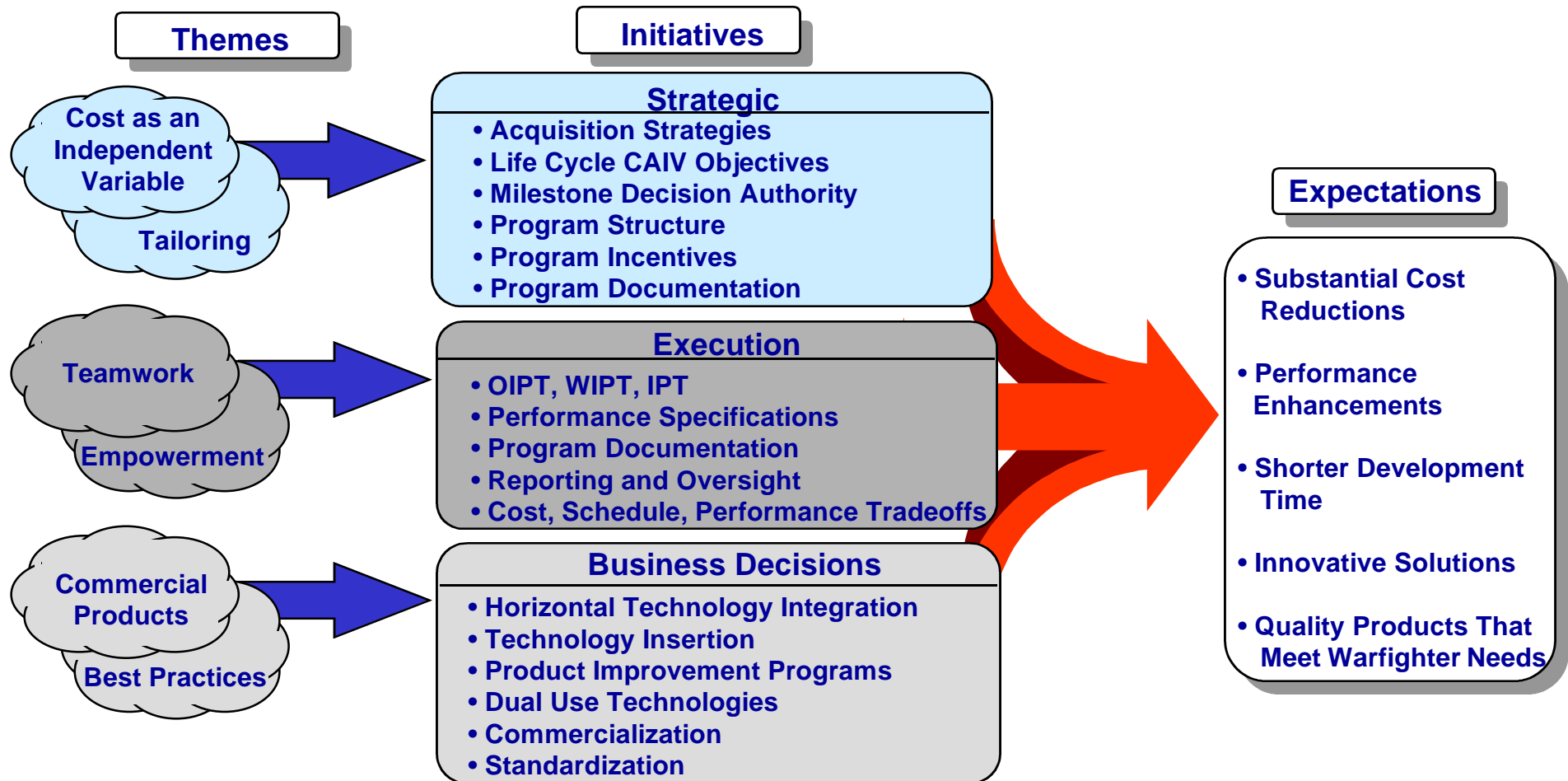
(DoDD 5000.1, Defense Acquisition, page 3, paragraph D, Policy, March 15, 1996)



Acquisition Reforms Integrate Multiple Themes and Initiatives To Achieve Life Cycle Cost Reductions and Savings While Meeting User Needs



DoD 5000 Theme Focus



Acquisition Reforms facilitate a new way of doing business for the acquisition management community



Life Cycle Cost (LCC) Reduction

- PBD 714: Program Budget Directive 714
- RE/TI: Reverse Engineering/Technology Insertion
- VE: Value Engineering
- OSCR: Operation and Support Cost Reduction
- SAVE: Saving through VE (DLA)
- CTIP: Commercial Technology Integration Program
- DUAP: Dual Use Application Program

Programs

Life Cycle
Cost Reduction
Programs

PBD
714

RE/TI
\$

VE
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OSCR
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SAVE
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CTIP
\$

DUAP
\$

Initiatives

CAIV
(Cost as an
Independent Variable)

Modernization
Through
Spares

Performance
Specifications

Life Cycle
Cost Reduction
Initiatives

- Multiple Initiatives Exist to Drive LCC Reductions
- Multiple Programs with Funding Exist to Implement LCC Reductions
- PEOs and PMs Can Take Advantage of Existing Programs to Reduce O&S Costs
- Cost Reduction Processes Need to be Implemented at PEO and PM Levels to Maximize Benefits

Logistics cost reduction initiatives are critical for maintaining weapon system affordability throughout the system life cycle



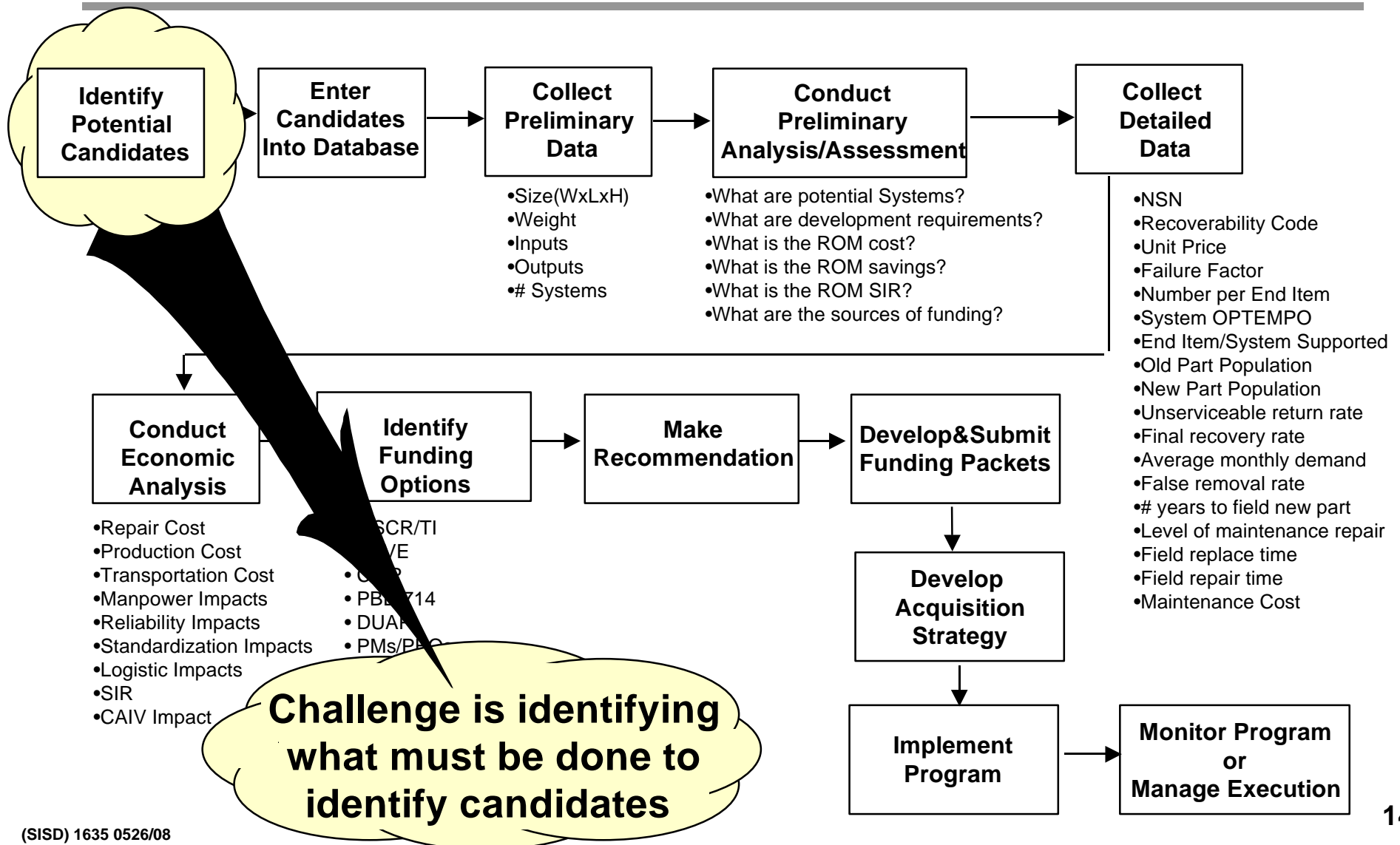
Modernization Through Spares Focus Areas

- **Spare Parts Provisioning**
 - Performance Specifications
 - Production Lead Times
- **Maintenance Concepts**
 - Depot
 - Contractor Logistic Support
 - Fix-Forward
- **Enhanced Performance**
 - Capability Improvements
- **Life Cycle Management**
 - Obsolescence
 - Technology Upgrades
 - Extended Life
 - Improved Reliability, Availability, Maintainability

Issue to Address is the Life Cycle Management of Weapon Systems



Modernization Through Spares Workshop Challenge





Definitions for Modernization Through Spares Workshop

Horizontal Technology Integration

The application of common technologies across multiple systems inserted into spare parts to improve warfighting capability. HTI weapon system effectiveness includes performance enhancements, extending the life of the system, life cycle management and enhancements for reliability, availability, and maintainability

Technology Insertion

The upgrade of spare and repair parts to utilize the advantage of stable, proven and developed technology (known as , “state of practice”) for improvements in performance, cost, reliability, and maintainability for the life cycle management of weapon systems.

Commercial Technology Insertion

The process of actively identifying and utilizing commercial off the shelf technology to meet the Army requirements with the intent to leverage the attributes of high production rates, short development cycles and continuous product improvements to contribute to affordability.



Case Study Format

Case Study

- **General Notes:**

Questions to be answered

- Why did you do this?
- How was this solution identified?
- What are/were the expected benefits?

- **Barriers:**

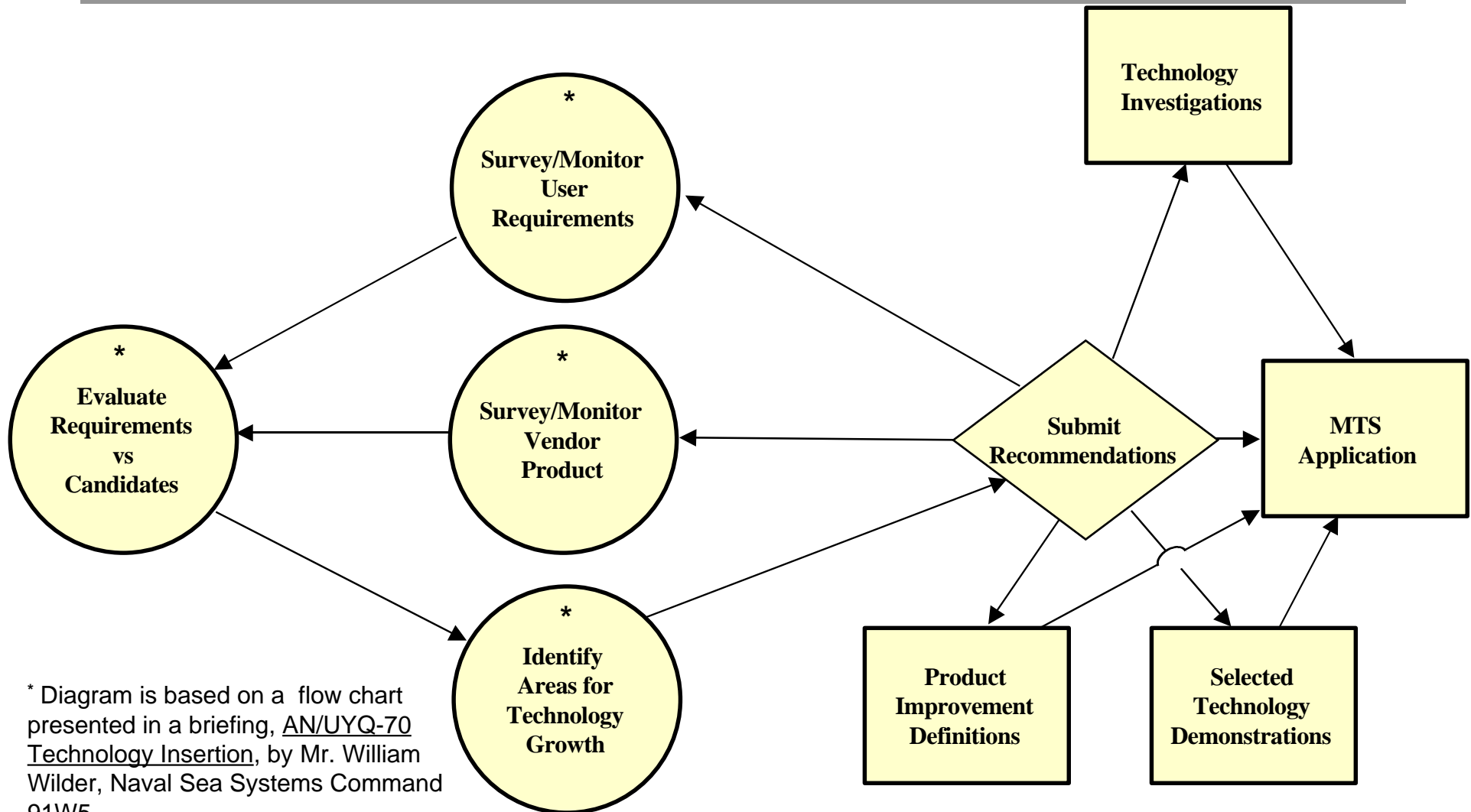
- **Process:**

- **Environment:**

- **Key Points:**



Modernization Through Spares Conceptual Process



* Diagram is based on a flow chart presented in a briefing, AN/UYQ-70 Technology Insertion, by Mr. William Wilder, Naval Sea Systems Command 91W5.

*** Potential Start Points**